

ABSTRACT

Packet routing via payload inspection at routers in a core of a distributed network. Packets include subjects and attributes in addition to routing information. The subjects correspond with particular types of content for subscriptions, and the attributes encapsulate the data or content. The routers store filters corresponding with subscriptions to content. Upon receiving a packet, a router inspects the payload section of the packet containing the attributes in order to retrieve the attributes and apply them to the filters for the subscriptions. If an attribute satisfies a filter, the packet is routed to the next link. If the attributes do not satisfy the filters, the router discards the packet. These routing decisions are distributed among routers in the network core. The router locally caches the data in the network core.